Augmented Reality Visualizations of Internet of Things Data

Project Leaders

Katy Börner
Indiana University

Andreas Bueckle
Indiana University

Mike Hu
Indiana University
Who We Are

Kingberli Capellan
Agnes Duru
Christy Lee
Jieun Lee
Alyssa McGhee

Jennifer Mince
Halima Monds
Sierra T. Reed
Ploy Sithisakulrat
Yiyao Wei
AMATRIA

Image sources:
https://cns.iu.edu/amatria.html
We Built 5 Amatria Babies!

Moths are one of the main actuators in the sculpture. They have two vibrating motors and two LEDs to interact with people.

They are comprised of:

- 1 node controller
- 1 acrylic sled for node controller
- 2 acrylic arms
- 2 double-frosted mylar frawns
- 2 LEDs
- 2 motors
Amatria Moth Components and Manual

Legend:
1. modem (1)
2. Moth (1)
3. Moth shield (1)
4. Moth lid (1)
5. Moth lid fastening (2)
6. Moth shield fastening plate (1)
7. Moth lid detector (1)
8. Electronic circuit (1)
9. Moth's washer (1)
10. Hand washer (2)
11. LED (hands) (1)
12. LED (head) (1)
13. Power plug (1)
14. AC power (1)
15. Flat P20mm cable (4/2mm) (1)
16. Modular plug (4/2mm) (1)
17. Metal frame (1)
18. BPST (1)
19. 9V battery (1)
20. Memory button (1)
21. 2W speaker (1)
22. AAA battery (1)
23. Control 2/3mm (1)
24. Screw & washer for battery pack (1)
25. Screw & washer for moth lid (2)
26. Large plastic screw (2)
27. Axial bearing (large plastic screw) (1)

Project:
Amatria Moth

Title:
Amatria Moth Parts
Demo Time!
Potential Research Questions

- How can this be used in everyday living by “normal people” outside of CS?
- How can Amatria (and more broadly, IoT) empower people to make more informed, aware decisions?
- Could Amatria moths be built with different materials? New tools?
- Is sentient architecture suitable for everyone’s home? What is the benefit to have it at home? And what are the potential issues?
- How can we utilize Amatria Moth to connect and empathize (particularly between human beings who are physically distant from each other)? Human computer interaction?
- How can we optimize Amatria to be more feasible to assemble and more suitable for every household? Optimize and educate?
- What would sentient architecture look like if it weren't a sculpture? Shape?
Reference

- https://cns.iu.edu/amatria.html
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